

Amendments To The Specification:

In the English translation document, please replace the term “arc conductive element” with “arc guiding element” throughout the entire specification. This inexact translation occurred without deceptive intent while translating the corresponding German language International application into English.

In the English translation document, please delete the term --Description-- at page 1 written line 1, before the title.

In the English translation document, please add the paragraph at page 1 after written line 2, after the title, as follows:

--CROSS REFERENCE TO RELATED APPLICATIONS

This application is the US National Stage of International Application No. PCT/DE2003/002883, filed August 28, 2003 and claims the benefit thereof. The International Application claims the benefits of German application No. 10250950.6 filed October 25, 2002, both applications are incorporated by reference herein in their entirety.--

In the English translation document, please add the section heading at page 1 after written line 2, after the newly added CROSS REFERENCE TO RELATED APPLICATIONS section, as follows:

--FIELD OF THE INVENTION--

In the English translation document, please add the section heading at page 1 after written line 7, as follows:

--BACKGROUND OF THE INVENTION--

In the English translation document, please add the paragraphs at page 2 after written line 8, as follows:

In addition, it is known in the case of a low voltage circuit breaker according to said type that provision must be made for an arc conductive element on the arc transmitting element which makes it possible to direct said arc in a defined manner to the arc extinction chamber (US 6,417,474 B1).

Publication US 4,885,441 describes an arc transmitting element with an arc conductive element in which the arc conductive element has two running edges running at different angles to a center line of the arc transmitting element in which case the running edges extend away from an edge zone in the direction of a middle zone of the arc transmitting element.

In the English translation document, please add the section heading at page 2 after written line 8, after the newly added paragraphs, as follows:

--SUMMARY OF THE INVENTION--

In the English translation document, please amend the paragraph at page 2 written lines 9-12, as follows:

~~Therefore, it~~ It is the object of the invention to ensure the transmission of the arc to the middle zone of the arc extinction chamber ~~create a low voltage circuit breaker according to said type in the case of which arcs defined in an arc extinction chamber can be transmitted in a simple manner.~~

In the English translation document, please amend the paragraph at page 2 written line 13 to page 3 written line 3, as follows:

According to the invention, this object of the invention is achieved by the claims ~~means of a low voltage circuit breaker with the features mentioned in Claim 1.~~ Because said arc transmitting element disposed between the contact system for a principal current and the arc extinction chamber comprises at least one arc conductive element which, in particular, has several running edges running at different angles to a center line of the arc transmitting element extending in the direction of a top side of the arc extinction chamber which extend away from an edge zone in the direction of a middle zone of the arc transmitting element and as a result of the fact that the arc conductive element is formed crown-shaped and has several prongs formed ray-shaped to the center line, it is advantageously achieved, independent of the point of origin of the arc, that the arc is directed away from the contact systems for a principal current to be protected against burning down, and that a shorter arc extinction period is reached. This results in decreasing the stress on both the contact systems for a principal current, on the one hand, and the arc extinction chamber, on the other hand, because these basically can now, by means of a defined start-up by

the arc, convert their arc extinction capacity with a high degree of effectiveness. It has been proven that by providing simple arc conductive elements to the arc transmitting element, it is possible to direct the arcs in a defined manner. Changes to the contact system for the principal current itself need not be made so that the modifications according to the invention are only limited to the arc transmitting element alone. As a result, the solution according to the invention is very simple and can therefore also be implemented cost-effectively in mass-produced low voltage circuit breakers ~~makes it possible to direct said arc in a defined manner to the arc extinction chamber, it is advantageously achieved that the arc is directed away from the contact systems for a principal current to be protected against burning down, and that a shorter arc extinction period is reached. This results in decreasing the stress on both the contact systems for a principal current, on the one hand, and the arc extinction chamber, on the other hand, because these basically can now, by means of a defined start-up by the arc, convert their arc extinction capacity with a high degree of effectiveness. It has been proven that by providing simple arc conductive elements to the arc transmitting element, it is possible to direct the arcs in a defined manner. Changes to the contact system for the principal current itself need not be made so that the modifications according to the invention are only limited to the arc transmitting element alone. As a result, the solution according to the invention is very simple and can therefore also be implemented cost-effectively in mass-produced low voltage circuit breakers.~~

In the English translation document, please add the paragraph at page 3 after written line 18, as follows:

In a preferred embodiment of the invention provision is made so that the running edges basically run parallel to the arc transmitting element. – As a result of this an optimum arc position can be controlled within the arc extinction chamber in a defined manner. – The running edges can be formed by a sharp-edged transition of a step in each case.

In the English translation document, please amend the paragraph at page 3 written line 26 to page 4 written line 12, as follows:

In further preferred embodiments of the invention there is provision for the arc conductive element to be non-positively connected to the arc transmitting element. As a result the arc conductive element can be embodied in a simple fashion. This only requires the manufacturing

of an arc conductive element with a simple design – for example, as a stamped part – and the fixing of this arc conductive element to the arc transmitting element – for example, by means of welding. In the case of a correspondingly selected system of ray-shaped prongs of the stamped part, the running edges can be determined for the arc in a simple way. This particularly allows the different sizes of the arc extinction chambers can be adapted easily. The ray-shaped prongs preferably have two running edges for the arcs running at right angles to one another which run from the edge zone of the arc transmitting element into the middle of the arc extinction chamber. As a result, depending on the point of origin and the intensity, it is possible to direct said adapted arc to the arc extinction chamber a further preferred embodiment of the invention provision is made so that the are conductive element is non-positively connected to the are transmitting element. As a result of this, the are conductive element can be embodied in a simple fashion. This only requires the manufacturing of an are conductive element with a simple design—for example, as a crown-shaped stamped part—and the fixing of this are conductive element to the are transmitting element—for example, by means of welding. In the case of a correspondingly selected system of pronged rays of the crown-shaped stamped part, the running edges can be determined for the are in a simple way. In this way, particularly the different sizes of the are extinction chambers can be adapted easily. The rays preferably have two running edges for the ares running at right angles to one another which run from the edge zone of the are transmitting element into the middle of the are extinction chamber. As a result of this, depending on the point of origin and the intensity, it is possible to direct said adapted are to the are extinction chamber.

In the English translation document, please amend the paragraph at page 4 written lines 28-29, as follows:

Further preferred embodiments of the invention can be found in the other features mentioned in the dependent subclaims.

In the English translation document, please add the section heading at page 4 after written line 29, as follows:

--BRIEF DESCRIPTION OF THE DRAWINGS--

Serial No. Not Yet Assigned
Atty. Doc. No. 2002P13631WOUS

In the English translation document, please add the section heading at page 5 after written line 10, as follows:

--DETAILED DESCRIPTION OF THE INVENTION--